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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,735	10/31/2003	Ravinder Prakash	CHA920030024US1	3130

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EXAMINER
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KRASNIC, BERNARD

ART UNIT	PAPER NUMBER
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2624

NOTIFICATION DATE	DELIVERY MODE
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04/21/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hwdpatents.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/698,735	<b>Applicant(s)</b> PRAKASH ET AL.	
	<b>Examiner</b> BERNARD KRASNIC	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. The amendment filed 1/29/2008 have been entered and made of record.
2. The application has pending claim(s) 1-22.

3. In response to the amendments filed on 1/29/2008:

The "Claim rejections under 35 U.S.C. 101" have been entered and therefore the Examiner withdraws the rejections under 35 U.S.C. 101. The support for the computer readable medium as understood by the Examiner is found in the specification [see page 10, lines 14-17, page 5, lines 19-21] wherein the program product is stored / loaded on a computer system / computer readable medium which is defined as a type of memory buffer.

4. Applicant's arguments filed 1/29/2008 have been fully considered but they are not persuasive.

The Applicant alleges, "I. Lack of motivation to combine ..." in pages 7-8, and states respectively that the prior art reference Cain has nothing to do with synchronizing characters but rather teaches manually entering the missing character data from a read error which has "no motivation whatsoever" to modify Tyburski as proposed. The Examiner disagrees because Tyburski clearly teaches that the positionally synchronized character string (e.g. account field) is analyzed (analyzed for substitution of ambiguous

characters) for the two transducers (MICR and OCR) even when ambiguity between the two sets occurs [see Tyburski, e.g. column 6, line 68, column 7, lines 1-3]. This ambiguity that causes one of Tyburski's reader's to fail in recognizing a character [see Tyburski, abstract, lines 1-3] is taught by Cain to be a result from missing character data due to dirt [see Cain, col. 8, lines 67-69, col. 9, lines 1-2]. Cain is relied upon only to teach that Tyburski's MICR read errors / not recognizing a character are due to missing character data resulting from dirt because the Tyburski reference is silent in referring to what exactly causes the ambiguity of a MICR read error / not recognizing a character. This teaching clearly discloses the claim limitation that at least one set of transduced character information includes a string of characters having a missing or erroneously added character information [the Tyburski reference teaches the synchronizing positional character data from different sets of transduced character information and also that one of the reader's may fail to recognize a character and Cain further teaches that this failure to recognize a character is due to the missing character data from the presence of dirt]. Further in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, a transducer reader fails to recognize a character in both Tyburski and Cain and Cain

provides the motivation of failure because of missing characters due to dirt. Therefore claims 1, 8, 16, and 20 are still not in condition for allowance because they are still not patentably distinguishable over the prior art references.

The Applicant alleges, "II. Ott fails to teach ..." in pages 8-10, and states respectively that the prior art reference Ott doesn't teach the position of each such image field is based on a distance from the image field to a predetermined location on the document but instead Ott's X-Y coordinates are based on pixel locations of where an image field falls within the entire image space and thus doesn't teach "a relative distance that does not change even if the document shifts or is skewed within the image space" as is provided in claim 4. Firstly, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a relative distance that does not change even if the document shifts or is skewed within the image space") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Secondly, Ott's X-Y coordinates are based on pixel locations and pixel locations have a predetermined location reference point X-Y (0,0) at the top left corner of the document [as is well known in the image analysis and image processing art] and as you then move to the right, or as you move down from that reference (0,0) point, the pixel coordinates take into effect. Therefore the limitation of each position measurement / X-Y coordinate measurement provides a distance / X-Y pixel distance from the character to a predetermined location / (0,0) X-Y

reference position on the top left on a document is disclosed and taught by Ott [see Ott, abstract, lines 6-10, col. 7, lines 36-39, col. 8, line 4, X-Y coordinate is based on seed-pixel or object or character location on an image and pixel locations tell the distance from the top left edge (0,0) reference point of a document to the pixel being considered]. Therefore claims 4, 5, 12, 13, 17, 18, and 21 are still not in condition for allowance because they are still not patentably distinguishable over the prior art references.

Therefore claims 1-22 are still not in condition for allowance because they are still not patentably distinguishable over the prior art references.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyburski et al (US 3,764,978, as applied in previous Office Action), in view of Ott et al (US 5,754,674, as applied in previous Office Action) and Cain (US 4,523,330, as applied in previous Office Action).

Re Claim 1: Tyburski discloses a character recognition system (see Fig. 1, abstract, lines 1-3), comprising at least one transducer / OCR (4) and MICR (2) system for scanning printed character data and generating a plurality of sets / two sets (one for the OCR and one for the MICR) of transduced character information / output of OCR (4)

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and MICR (2) (see Fig. 1, abstract, lines 1-3, col. 2, lines 65-67, col. 1, lines 39-49, col. 3, lines 51-52); a position collection system / character recognition circuitry for collectively storing / computer buffer circuitry positional data / character information for each of a plurality of characters / group of characters (22, 24) in each set / two sets (one for the OCR and one for the MICR) of transduced character information (see Figs. 1 and 3, abstract, lines 1-3, col. 2, lines 20-24, col. 3, lines 41-55, col. 4, lines 55-58, the teachings “can recognize a group of characters” shows Tyburski’s system recognizes the account field 24 which is shown as “786” or the amount field 22 which is shown as “000000” as a set or group or string which is essentially plurality of characters being stored collectively using the computer buffers or the character recognition circuitry [the group of characters are considered collectively], this character information is not the positional information, however Tyburski discloses this positional information silently when he explains that the “same” character is considered from both the MICR and the OCR); a character position synchronization system / synchronization circuitry that utilizes the positional data / character information stored / computer buffer circuitry for the plurality of characters / group of characters to positionally synchronize corresponding characters / synchronize same characters from different sets / two sets OCR and MICR of transduced character information (see Fig. 1, col. 3, lines 51-64, Tyburski uses the character information including the time delay for the synchronization circuitry as a means to wait for the positions of the characters to align in order to establish a comparison between the “same” characters) in which at least one set of transduced character information includes a string of characters having a missing or

erroneously added character (see column 6, line 68, column 7, lines 1-3, Tyburski states “if the field” [e.g. account field 24 of Figure 1 is basically the Applicants claimed string of characters] “does not check, a feedback signal on line 15a is sent back to block 12 and the magnetic signal is then substituted for the optical signal, for the character with respect to which the ambiguity occurred”, Tyburski is clearly stating that the positionally synchronized character string [e.g. account field] is analyzed [analyzed for substitution of ambiguous characters] for the two transducers [MICR and OCR] even when ambiguity between the two sets occurs); and a voting engine / minicomputer for receiving the positionally synchronized sets of transduced character information (see col. 4, lines 16-22, col. 1, lines 39-49, the minicomputer using the synchronized recognition signals from the OCR and the MICR, correlates the two signals and decides a best match).

However, Tyburski fails to specifically disclose or fairly suggest that the positional data is stored and used for character synchronization. Tyburski also fails to specifically disclose that the string of characters have a missing or erroneously added character.

Ott discloses storing / memory the positional data / character XY coordinate on the check (see Ott, col. 1, lines 7-12, col. 2, line 55, col. 6, lines 52-54, col. 7, lines 41-47, col. 8, lines 1-4) and using the stored data for character synchronization (Tyburski teaches synchronization).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tyburski’s system [system of recognizing either a single or a plurality of characters from a check document and synchronizing the

corresponding characters so a correlation between these corresponding MICR and OCR characters may result in a decision of a best match] using Ott's teachings by including the storing of each character's corresponding positional XY coordinate data to Tyburski's position collection system and character position synchronization system in order to further enhance the verification of legibility of characters of a check document (see Ott, col. 1, lines 7-12, col. 2, line 55).

However, Tyburski as modified by Ott still fails to specifically disclose that the string of characters have a missing or erroneously added character.

Cain discloses a string of characters / MICR line 34 (see Cain, Fig. 5) having a missing character / character or numbers (see Cain, col. 8, lines 67-69, col. 9, lines 1-2, missing characters or numbers in a MICR read as a result of dirt for example).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Tyburski's system, as modified by Ott, using Cain's teachings by including to Tyburski's ambiguity [as discussed in Tyburski's teachings above] the fact that the ambiguity could be a missing character of a string due to dirt in order to improve the identification of the incomplete MICR data (see Cain, col. 9, lines 12-13).

As to claim 8, the claim is the corresponding broader apparatus claim to claim 1 respectively. The discussions are addressed with regard to claim 1.

As to claim 16, the claim is the corresponding method claim to claim 1 respectively. The discussions are addressed with regard to claim 1.

As to claim 20, the claim is the corresponding means plus function claim to claim 1 respectively. The discussions are addressed with regard to claim 1.

The limitations, as recited in claim 20, “means for collectively storing” in line 3, and “means for positionally synchronizing” in line 5, invoke 35 USC 112, 6<sup>th</sup> paragraph.

Re Claim 2: Tyburski further discloses an optical character recognition (OCR) (4) transducer and a magnetic ink character recognition (MICR) (2) transducer (see Fig. 1, Abstract, lines 1-3).

Re Claim 3: Ott further discloses at least one transducer system (taught by Tyburski above) generates a plurality of sets (taught by Tyburski above) of transduced character information based on different gray-scale level settings / normal sensitivity and higher sensitivity (see Abstract, lines 1-4, col. 2, lines 60-68, col. 5, lines 14-19 and lines 43-44).

Re Claim 4: Ott further discloses the position information system (taught by the Tyburski and Ott combination above) generates a position collection for each character (taught by the Tyburski and Ott combination above) in the at least one set of transduced character information, wherein each position / X-Y coordinate measurement provides a distance from the character to a predetermined location on a document containing the printed character data (see Abstract, lines 6-10, col. 7, lines 36-39, col. 8, line 4, X-Y coordinate is based on seed-pixel or object or character location on an image and pixel

locations tell the distance from the top left edge of a document to the pixel being considered).

Re Claim 5: Ott further discloses the predetermined location includes an edge of the document (see Abstract, lines 6-10, col. 7, lines 36-39, col. 8, line 4, X-Y coordinate is based on seed-pixel or object or character location on an image and pixel locations tell the distance from the top left edge of a document to the pixel being considered).

Re Claim 6: Ott further discloses each position measurement provides a distance from a middle point of the character to the predetermined location (see Abstract, lines 6-10, col. 7, lines 36-39, col. 8, lines 4-18, X-Y coordinate is based on seed-pixel or object or character location on an image and pixel locations tell the distance from the top left edge of a document to the pixel being considered which could be the middle point of the object or character).

Re Claims 7: Tyburski further discloses the character position synchronization system / synchronization circuit (6) determines if characters from different sets of transduced characters / OCR and MICR correspond to each other by matching / minicomputer the position measurement of the characters in different sets, within a predetermined tolerance (see col. 4, lines 16-22, col. 1, lines 39-49, the minicomputer using the synchronized recognition signals from the OCR and the MICR, correlates the two signals and decides a best match, the predetermined tolerance limitation is silent but a

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matching between two signals could only be done by some type of parameters which consider tolerance).

Re Claim 9: Tyburski further discloses at least one transducer system / OCR (4) and MICR (2) for scanning printed character data and generating the corresponding sets / two sets (one for the OCR and one for the MICR) of transduced character information / output of OCR (4) and MICR (2) (see Fig. 1, Abstract, lines 1-3, col. 2, lines 65-67, col. 1, lines 39-49, col. 3, lines 51-52).

As to claim 10, the discussions are addressed with respect to claim 3.

Re Claim 11: Tyburski further discloses a voting engine / minicomputer for processing the corresponding sets / corresponding recognition signals (17, 18, 12a) of transduced character information (see col. 4, lines 16-22, col. 1, lines 39-49, the minicomputer using the synchronized recognition signals from the OCR and the MICR, correlates the two signals and decides a best match).

As to claims 12-15, the discussions are addressed with respect to claims 4-7.

As to claims 17-18 and 19, the discussions are addressed with respect to claims 4-5 and 7.

As to claims 21 and 22, the discussions are addressed with respect to claims 4 and 7.

The limitation, as recited in claim 22 “means for positionally synchronizing” in line 1, invokes 35 USC 112, 6<sup>th</sup> paragraph.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 8:00am-4:00pm and every other Friday 8:00am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bernard Krasnic

April 9, 2008

/Jingge Wu/

Supervisory Patent Examiner, Art Unit 2624